Title (en)

Blade pitch adjustment system for wind turbine

Title (de)

Blattverstellsystem für Windenergieanlage

Title (fr)

Dispositif de réglage du pas de l'hélice pour turbine éolienne

Publication

EP 1596064 B1 20151014 (DE)

Application

EP 05009780 A 20050504

Priority

DE 102004023773 A 20040511

Abstract (en)

[origin: EP1596064A2] The wind turbine has a tower, and car is rotatably mounted on the tower, a rotor at the car rotatable about a rotor axis of rotation and has a rotor hub and a rotor blade which is coupled by a blade bearing to the rotor hub while rotatable about a blade adjustment axis. The blade bearing has an inner ring firmly affixed to the rotor hub and an outer ring that is fitted with teeth and that is firmly connected to the rotor blade. The rotor blade is rotatable by a blade adjustment drive having a drive motor actuating a drive pinion meshing with the outer teeth of the outer ring. The rotor hub's side is away from an enclosure. The drive pinion is configured at an angle of 10 to 30 degrees as measured about a blade adjustment axis toward a plane subtended by the rotor axis of rotation and the blade adjustment axis. The drive motor is mounted at a distance from the rotor axis of rotation that is smaller than a distance between the drive pinion and the rotor axis of rotation. The two blade adjustment drives are configured in a manner that an access aperture to the rotor hub remains between the blade adjustment drives. The blade adjustment drives are arrayed in the form of an equilateral triangle.

IPC 8 full level

F03D 1/00 (2006.01); **F03D 1/06** (2006.01); **F03D 7/00** (2006.01); **F03D 7/02** (2006.01); **F03D 11/00** (2006.01)

CPC (source: EP US)

F03D 1/0658 (2013.01 - EP US); **F03D 7/0224** (2013.01 - EP US); **F03D 80/70** (2016.05 - EP US); F05B 2240/40 (2013.01 - EP US); F05B 2260/4031 (2013.01 - EP US); F05B 2260/76 (2013.01 - EP US); F05B 2260/79 (2013.01 - EP US); F05B 2270/602 (2013.01 - EP US); Y02E 10/72 (2013.01 - EP US)

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DOCDB simple family (application)

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